



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/676,598	10/01/2003	Danny R. Smith JR.	186/41186	7990

279 7590 11/06/2006

TREXLER, BUSHNELL, GIANGIORGI,
BLACKSTONE & MARR, LTD.
105 WEST ADAMS STREET
SUITE 3600
CHICAGO, IL 60603

EXAMINER

LUONG, VINH

ART UNIT PAPER NUMBER

3682

DATE MAILED: 11/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/676,598	SMITH ET AL.	
	Examiner	Art Unit	
	Vinh T. Luong	3682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 April 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.



Vinh T. Luong
Primary Examiner

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>1/2/04</u> . | 6) <input checked="" type="checkbox"/> Other: <u>Attachments 1 and 2</u> . |

Art Unit: 3682

1. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3. The abstract of the disclosure is objected to because, *inter alia*, the abstract should: (a) not refer to purported merits or speculative applications of the invention as seen in the last

Art Unit: 3682

sentence; and (b) avoid the implied phrase “[t]he present invention provides . . .” Correction is required. See MPEP § 608.01(b).

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the claimed features, such as, the cable release system and the product in claims 1 and 17, the fastener in claim 3, and the interior surface of the product in claim 4 must be shown or the features canceled from the claims. *No new matter should be entered.*

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

5. The disclosure is objected to because of the following informalities: each part of the invention, such as, the cable release system and the product in claims 1 and 17 and paragraphs

Art Unit: 3682

[0020]-[0022] of the specification, the fastener in claim 3, and the interior surface of the product in claim 4 should be designated by a referential character. Appropriate correction is required.

6. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter, such as, “means for selectively retaining the cable sheath within said aperture of said mounting bracket” in claim 1 and “means for retaining said cable sheath within said mounting means” in claim 17. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction is required.

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, *to make and use* the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claims 1-17 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 1 recites: “[a]n assembly for securing a cable sheath *in a cable release system of a product*, said assembly comprising: a mounting bracket *configured to be secured to the product*.” (Emphasis added). However, the drawings merely show the assembly *per se*. The cable release system and the product are not shown. See paragraphs [0020]-[0022]. It is unclear as to how Applicant’s claimed mounting bracket is secured to the product as claimed. In other words, it is unclear as to how Applicant’s assembly is used with a cable release system of a product as claimed.

Art Unit: 3682

Similarly, claim 17 recites “means for mounting said cable sheath to the product.” However, the drawings do not show the product. It is unclear as to how the cable sheath is mounted to the product as claimed.

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 1-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear:

(a) Which structures define the claimed means-plus-function language, such as, “means for selectively retaining the cable sheath within said aperture of said mounting bracket” in claim 1 and “means for retaining said cable sheath within said mounting means” in claim 17. It is well settled that “[i]f one employs means-plus-function language in a claim, one must set forth in the specification an adequate disclosure showing what is meant by that language.” *In re Donaldson Co. Inc.*, 29 USPQ2d 1845, 1850 (Fed. Cir. 1994) and *In re Dossel*, 42 USPQ2d 1881, 1884 (Fed. Cir. 1997). Applicant is respectfully urged to identify each claimed means-plus-function with reference to the specification and drawings; and

(b) Whether a confusing variety of terms, such as, “an aperture” in claim 1 and “at least one aperture” in claim 3 refers to the same or different things. See MPEP 2173.05(o). Applicant is respectfully urged to identify each claimed element with reference to the drawings.

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

12. Claims 1-8 and 17, as best understood, are rejected under 35 U.S.C. 102(e) as being anticipated by Coudrais (US Patent No. 6,641,093 B2 filed on November 20, 2001).

Regarding claim 1, Coudrais teaches an assembly shown in Fig. 1-8 for securing a cable sheath 2 in a cable release system of a product 1, said assembly comprising: a mounting bracket 10 configured to be secured to the product 1, said mounting bracket 10 having an aperture (see Attachment 1 or "Att. 1") therein for receiving the cable sheath 2; and means 5 for selectively retaining the cable sheath 2 within said aperture (Att. 1) of said mounting bracket 10, said retaining means 5 configured to permit adjustment of the cable sheath 2 within said aperture (Att. 1) of said mounting bracket 10.

Regarding claim 2, said aperture of said mounting bracket 10 is sized such that the cable sheath 2 is prohibited from freely moving in a lateral position within said aperture (Att. 1) of said mounting bracket 10.

Regarding claim 3, said mounting bracket 10 has a first side (outer) surface (Fig. 1 of Att.), a second side (inner) surface (Att. 1), and at least one aperture (Fig. 1, Att. 1) which extends through said mounting bracket 10 from said first side surface to said second side surface, said at least one aperture (Att. 1) configured to receive a fastener 3 for securing said mounting bracket 10 to the product 1.

Regarding claim 4, said first side surface (Att. 1) of said mounting bracket 10 is planar

Art Unit: 3682

and wherein said first side surface (Att. 1) of said mounting bracket (Att. 1) faces an interior surface (Fig. 4, Att. 1) of the product 1 for securement of said mounting bracket 10 to the product 1.

Regarding claim 5, said mounting bracket 10 has a cavity (defined by fastening structure 5. See Fig. 7 of Att. 1) which extends into said mounting bracket 10 from one of said first and second side surfaces (Att. 1), said cavity (Att. 1) being in communication with said aperture (Fig. 2, Att. 1) of said mounting bracket 10.

Regarding claim 6, said cavity (Att. 1) extends into said mounting bracket 10 from said first side surface (Fig. 2, Att. 1).

Regarding claim 7, said cavity (Att. 1) of said mounting bracket 10 is capable of being wider than said aperture (Att. 1) of said mounting bracket 10 such that said cavity 5 defines an upper shoulder (Fig. 7, Att. 1) and a lower shoulder (Fig. 7, Att. 1).

Regarding claim 8, said retaining means 5 is configured to be inserted into said aperture (Figs. 7 and 8) of said mounting bracket 10 through said cavity in order to retain said cable sheath 2 within said aperture (Fig. 7) of said cable sheath 2, said retaining means 5 being bounded within said cavity (Att.) by said upper and lower shoulders (Att.) such that movement of said cable sheath 2 within said aperture (Att.) is bounded by movement of said retaining means 5.

Regarding claim 17, Coudrais teaches an assembly in a cable release assembly of a product 1, said assembly comprising:

a cable sheath 22;

(aperture) means for mounting said cable sheath 22 to the product 1; and

means 5 for retaining said cable sheath 22 within said (aperture) mounting means, said retaining means 5 configured to permit free rotation of said cable sheath 22 within said (aperture) mounting means.

12. Claims 1, 3-9, 11-13, and 15-17, as best understood, are rejected under 35 U.S.C. 102(e) as being anticipated by Dona-Contero et al. (US Patent No. 7,093,998 B2 filed on January 2, 2003).

Regarding claim 1, Dona-Contero teaches an assembly shown in Fig. 1-14 for securing a cable sheath 2 in a cable release system of a product 5, said assembly comprising: a mounting bracket 1 configured to be secured to the product 5, said mounting bracket 1 having an aperture (at E in Fig. 5, see Attachment 2 or "Att. 2") therein for receiving the cable sheath 2; and means 15 for selectively retaining the cable sheath 2 within said aperture (E) of said mounting bracket 1, said retaining means 15 configured to permit adjustment of the cable sheath 2 within said aperture (E) of said mounting bracket 1.

Regarding claim 3, said mounting bracket 1 has a first side (outer) surface (Fig. 1 of Att. 2), a second side (inner) surface (Att. 2), and at least one aperture (at 15 in Fig. 5) which extends through said mounting bracket 1 from said first side surface to said second side surface, said at least one aperture (Att. 2) configured to receive a fastener 15 for securing said mounting bracket 1 to the product 5.

Regarding claim 4, said first side surface (Att. 2) of said mounting bracket 1 is planar and wherein said first side surface (Att. 2) of said mounting bracket (Att. 2) faces an interior surface (Att. 2) of the product 1 for securement of said mounting bracket 1 to the product 5.

Regarding claim 5, said mounting bracket 1 has a cavity (Fig. 5, Att. 2) which extends

Art Unit: 3682

into said mounting bracket 1 from one of said first and second side surfaces (Att. 2), said cavity (Att. 2) being in communication with said aperture (Fig. 5, Att. 2) of said mounting bracket 1.

Regarding claim 6, said cavity (Att. 2) extends into said mounting bracket 1 from said first side surface (Fig. 2, Att. 2).

Regarding claim 7, said cavity (Att. 2) of said mounting bracket 1 is capable of being wider than said aperture (Fig. 6, Att. 2) of said mounting bracket 1 such that said cavity (Att. 2) defines an upper shoulder (Att. 2) and a lower shoulder (Att. 2).

Regarding claim 8, said retaining means 15 is configured to be inserted into said aperture (Att. 2) of said mounting bracket 1 through said cavity (Att.) in order to retain said cable sheath 2 within said aperture (Att. 2) of said cable sheath 2, said retaining means 15 being bounded within said cavity (Att. 2, Fig. 5) by said upper and lower shoulders (Att.) such that movement of said cable sheath 2 within said aperture (Att. 2) is bounded by movement of said retaining means 15.

Regarding claims 9 and 13, said retaining means is a retaining ring 15.

Regarding claims 11 and 15, said retaining ring 15 includes a middle section (Fig. 7, Att. 2), a pair of enlarged end sections (Att. 2), and a pair of intermediate sections (Att. 2) which interconnect said enlarged end sections (Att. 2) with said middle section (Att. 2), said enlarged end portions (Att. 2) being spaced from one another to define an opening (Att. 2) located opposite said middle section, said opening being configured to accept the cable sheath 2.

Regarding claims 12 and 16, said retaining ring 15 is configured to be adjustable and removable.

Regarding claim 17, Donna-Contero teaches an assembly in a cable release assembly of a product 5, said assembly comprising:

Art Unit: 3682

a cable sheath 2;

(aperture) means for mounting said cable sheath 2 to the product 5; and

means 15 for retaining said cable sheath 2 within said (aperture) mounting means, said retaining means 15 configured to permit free rotation of said cable sheath 2 within said (aperture) mounting means.

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

15. Claims 10 and 14, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Dona-Contero.

Regarding claims 10 and 14, Dona-Contero teaches the invention substantially as claimed. In addition, Dona-Contero explicitly teaches or suggests the spring material in column 1, lines 54-62. The spring material includes the spring steel.

It would have been obvious to one ordinary skill in the art at the time the invention was made to form Dona-Contero of well-known spring steel material in order to provide elasticity to

Art Unit: 3682

the retaining ring as taught or suggested by Dona-Contero. See *In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960) and MPEP 2144.07.

16. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

17. Claims 1 and 17, as best understood, are rejected under 35 U.S.C. 102(b) as being *clearly* anticipated by Bravo (US Patent No. 5,868,038).

Regarding claim 1, Bravo teaches an assembly comprising: a mounting bracket 7, said mounting bracket 7 having an aperture 11, 14 therein for receiving a cable sheath 9; and means 8 for selectively retaining the cable sheath 9 within said aperture 11, 14 of said mounting bracket 7, said retaining means 8 configured to permit adjustment of the cable sheath 9 within said aperture 11, 14 of said mounting bracket 7.

Regarding claim 17, Bravo teaches an assembly in a cable release assembly of a product (a non-adjustable fastening device, not shown, see column 2, lines 41-49), said assembly comprising:

a cable sheath 9;

(aperture) means 11, 14 for mounting said cable sheath 9 to the product; and

means 8 for retaining said cable sheath 9 within said (aperture) mounting means 11, 14, said retaining means 8 configured to permit free rotation of said cable sheath 9 within said (aperture) mounting means 11, 14.

18. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or

Art Unit: 3682

improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

19. Claims 1, 2, and 17, as best understood, are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, 14, and 15 of copending Application No. 11/225,658 (hereinafter “Appl.’658”). Although the conflicting claims are not identical, they are not patentably distinct from each other because Applicant used slightly different terminology in order to claim the substantially the same invention. *In re Griswold*, 150 USPQ 804 (CCPA 1966). See the comparison among claims 1 and 2 of this application and claims 1 and 2 of Appl.’658 below:

CommonAppl.’598Appl.’658

cable sheath

mounting bracket

aperture

means for retaining

opening/aperture (cl. 2)

means for securing

Art Unit: 3682

Although claims 1, 2, 14, and 15 of Appl.'658 further call for a cable extending through the cable sheath, however, note that the cable sheath claimed in this application inherently has the cable or the core extending through the cable sheath. Without the cable or the core, the cable sheath claimed in this application would be inoperative for its intended design. On the other hand, the cable/core is notoriously well known or conventional as evidenced by the Bowden cable art classified, e.g., in Class 74, subclass 502.4 or 502.6. See, e.g., the cable 24 in the above US Patent 7,093,998 B2 issued to Dona-Contero, and the cable 3 in the above US Patent No. 5,868,038 issued to Bravo.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to form a cable/core extending from the cable sheath claimed in the instant application in order to remotely control a product as taught or suggested by common knowledge in the art.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Takuro (Figs. 1-8) and De Giacomoni (Figs. 1-8).

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vinh T. Luong whose telephone number is 571-272-7109. The examiner can normally be reached on Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on 571-272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3682

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Luong

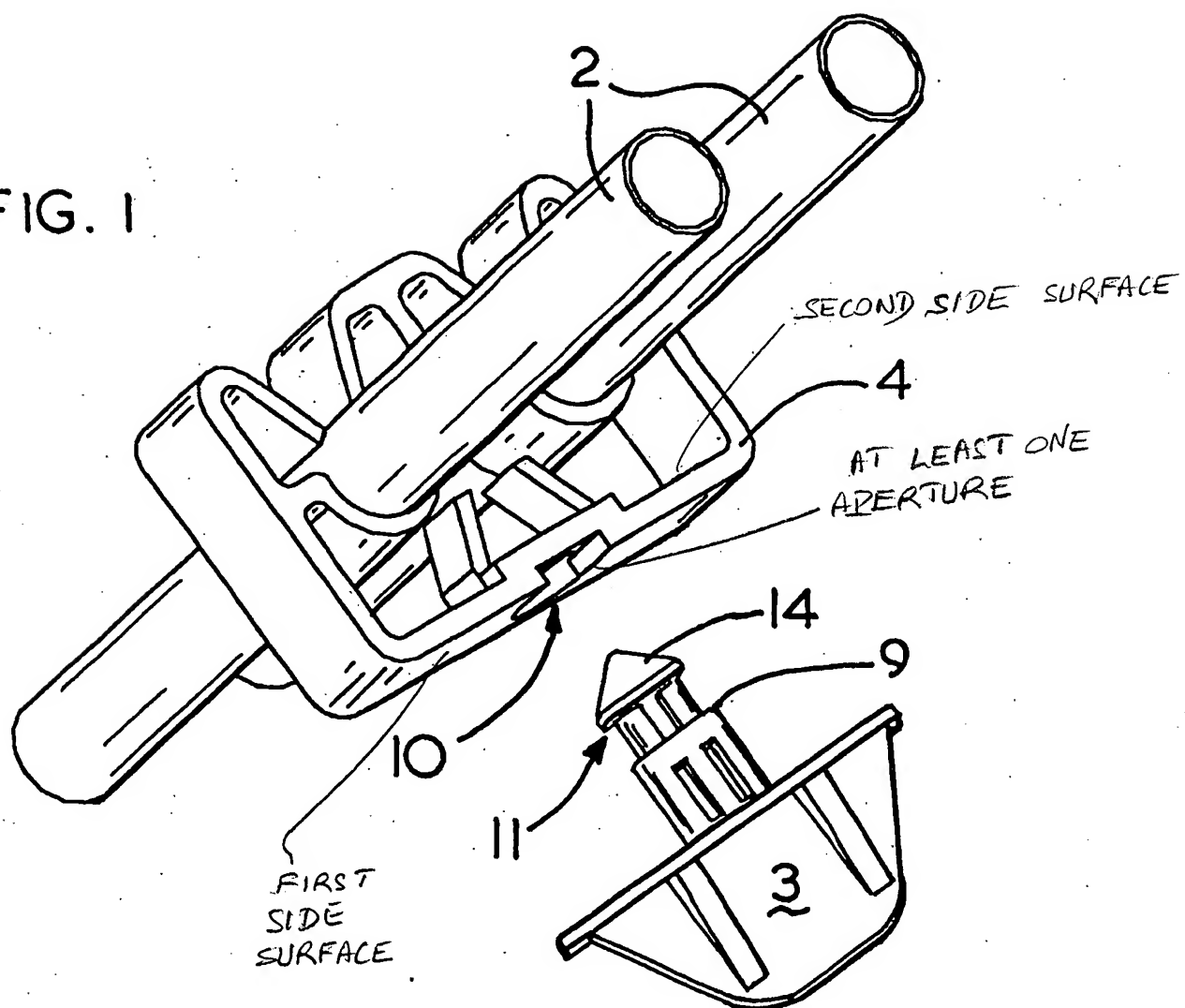
November 1, 2006



Vinh T. Luong
Primary Examiner

ATTACHMENT 1

FIG. 1



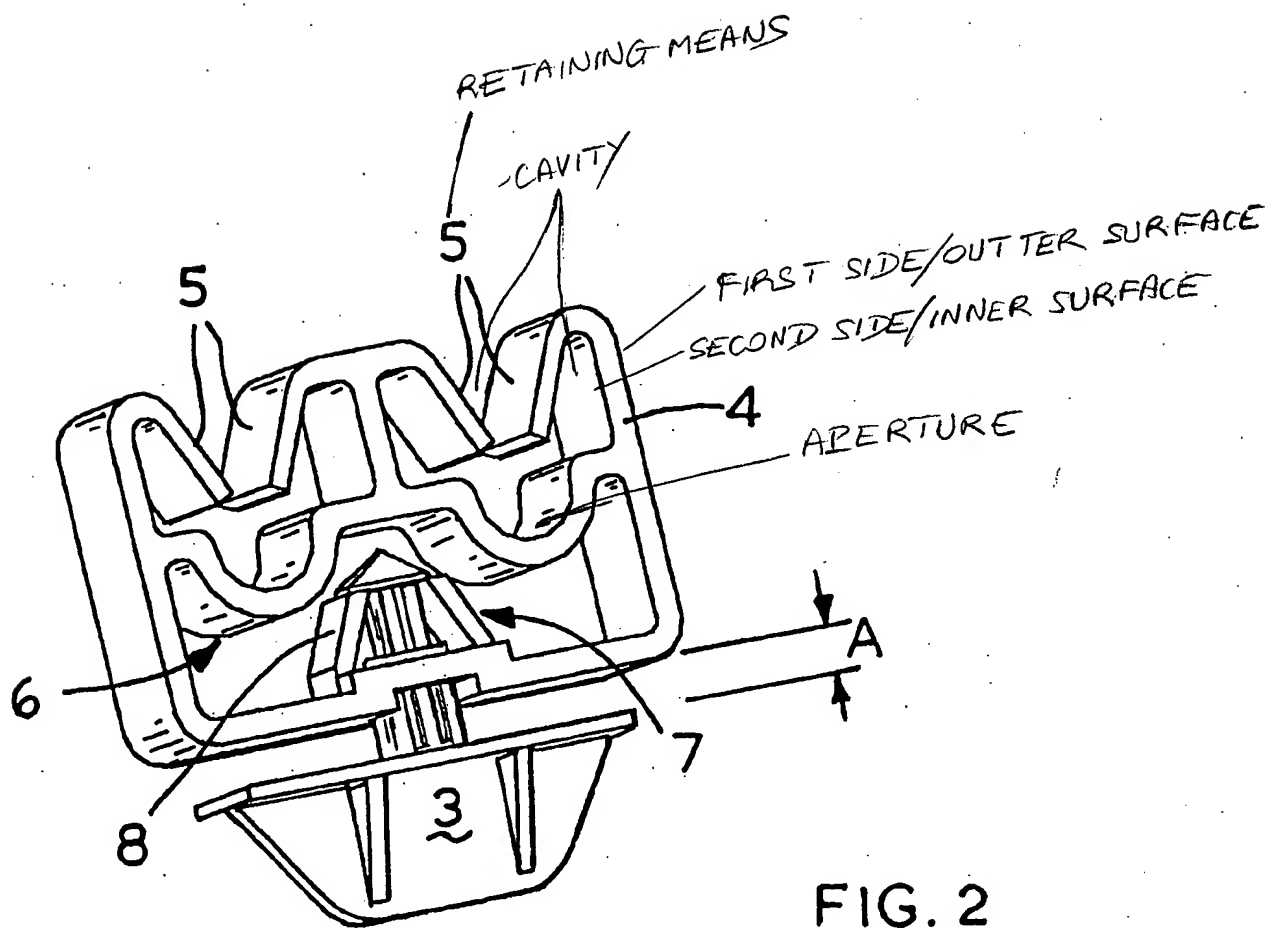


FIG. 2

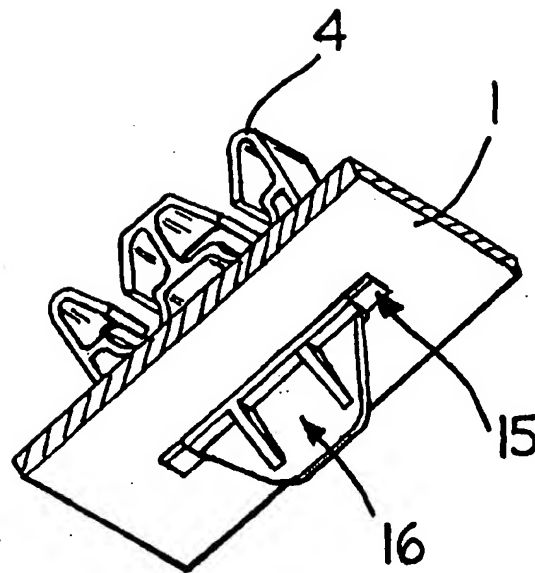


FIG. 3

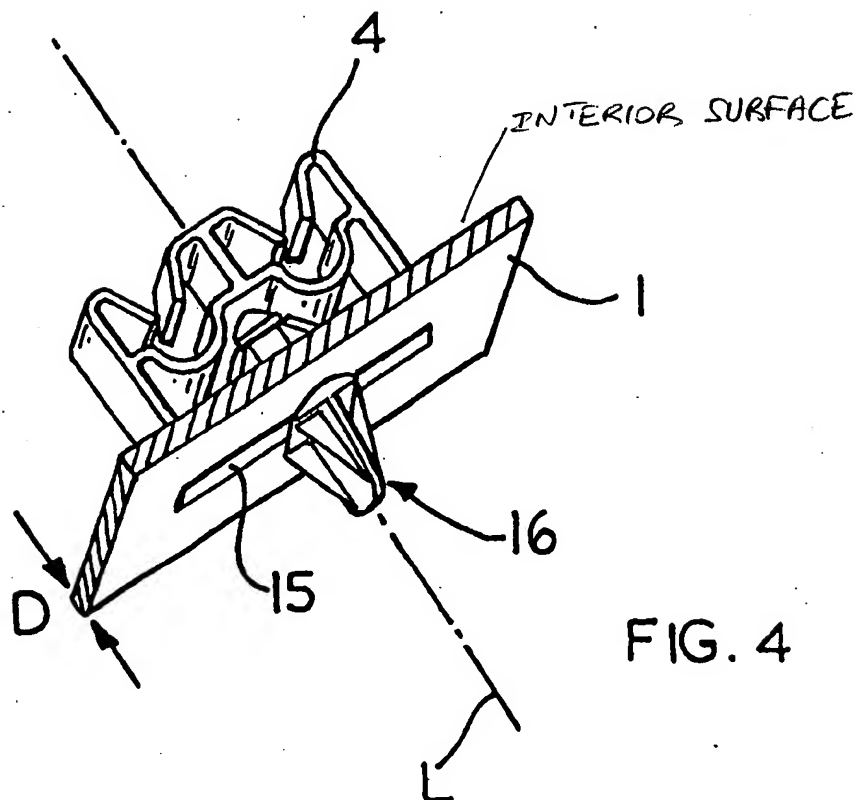
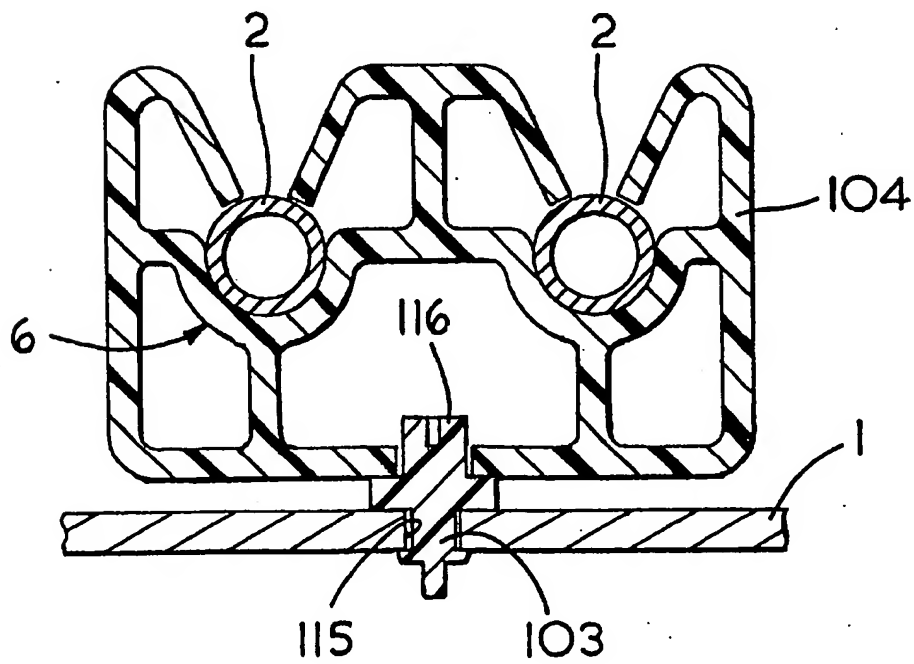
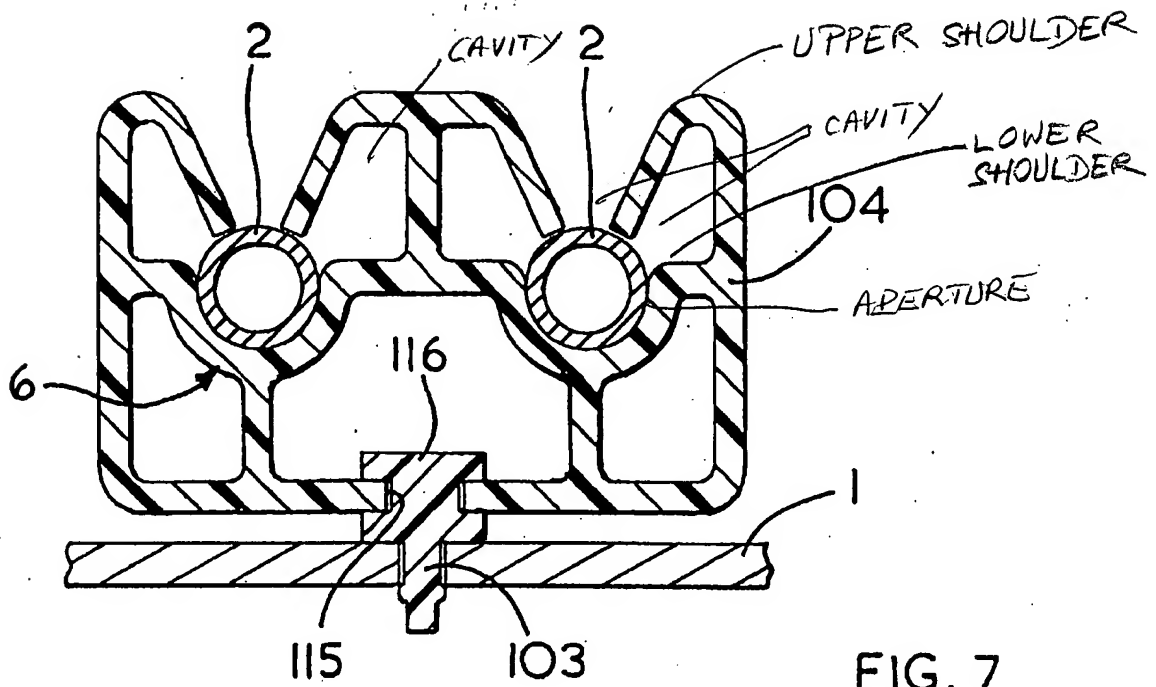


FIG. 4



ATTACHMENT 2

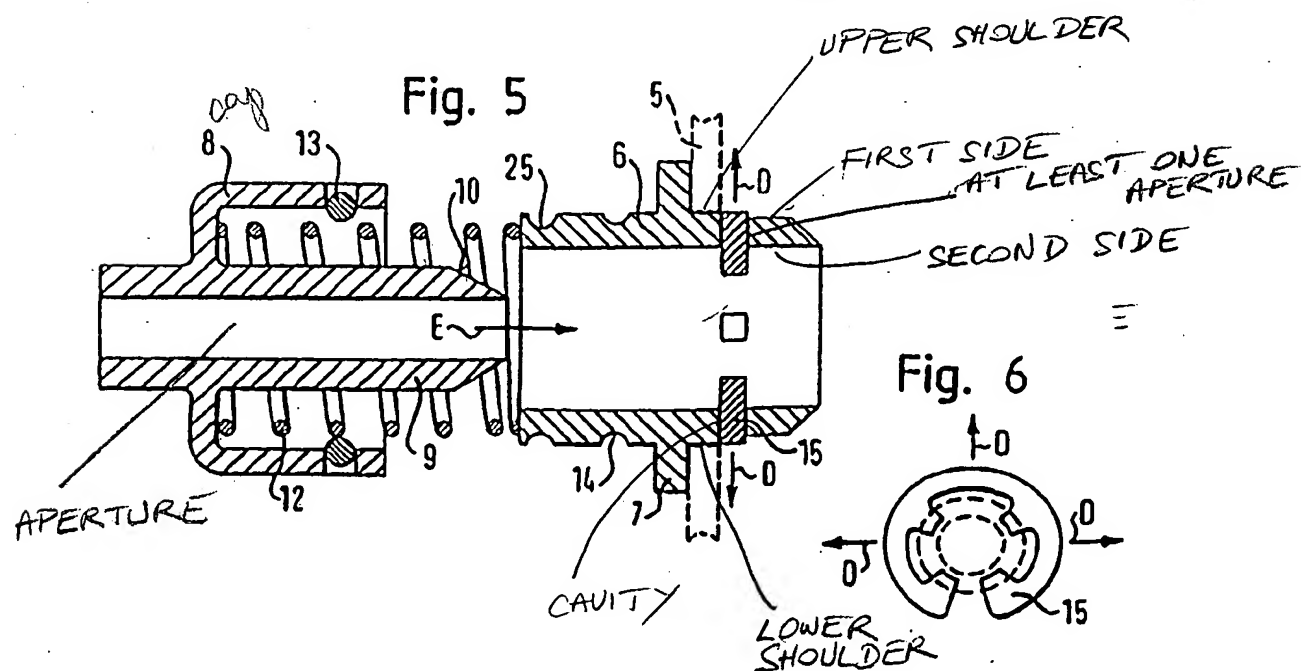
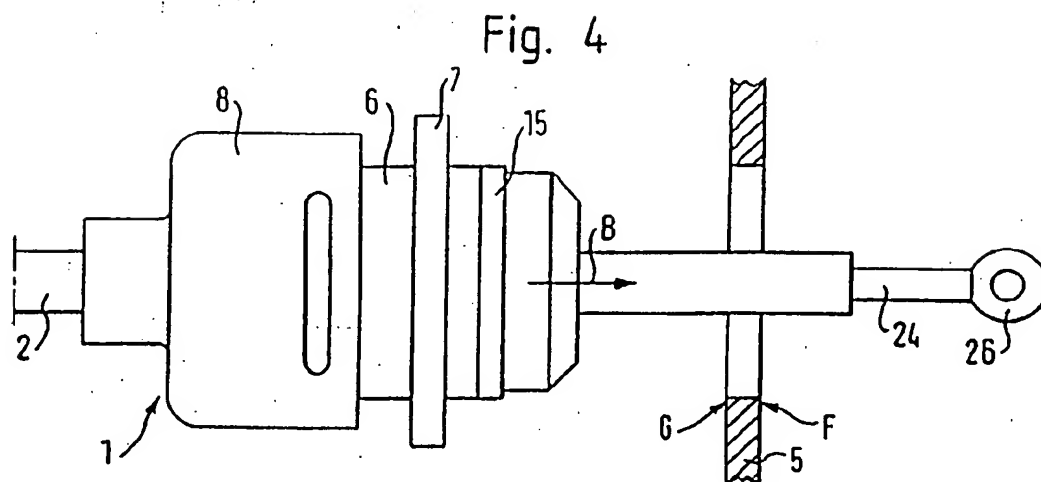
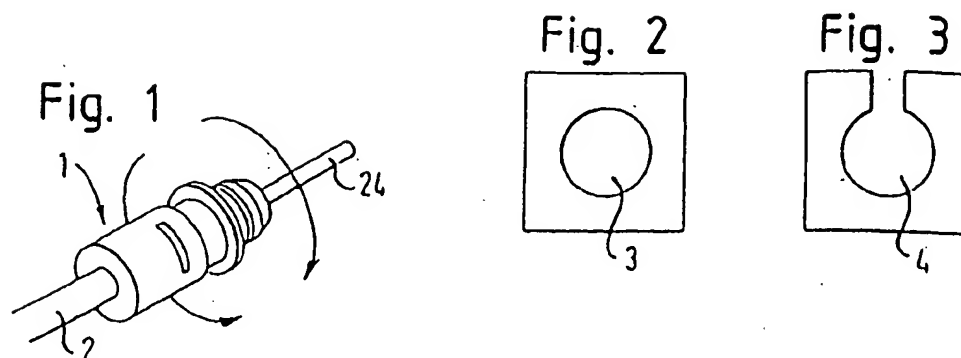


Fig. 7

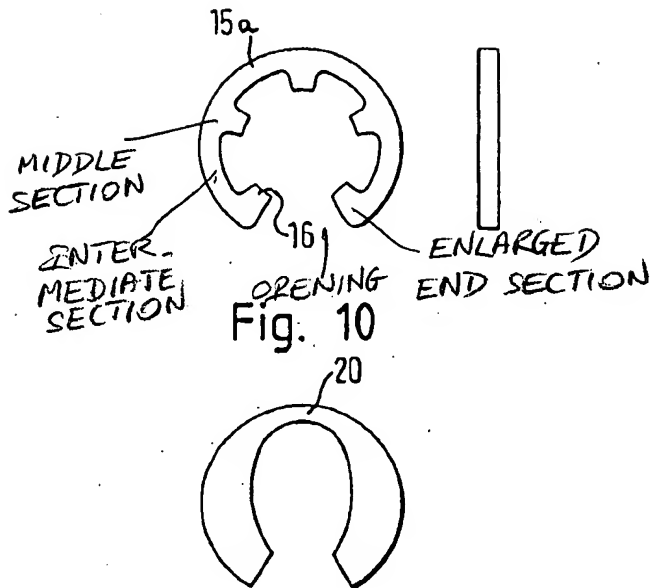


Fig. 8

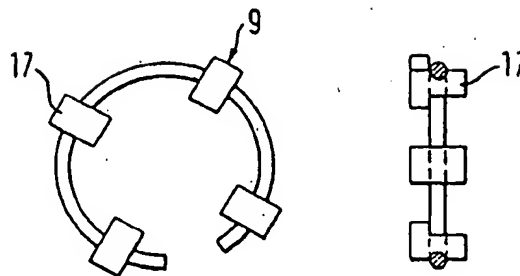


Fig. 9

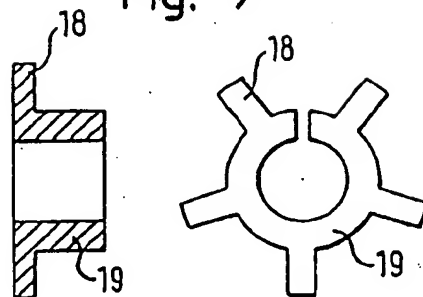


Fig. 11

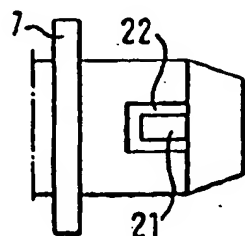
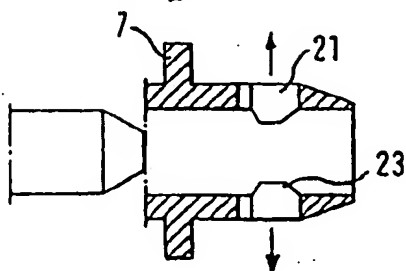


Fig. 12

Fig. 13

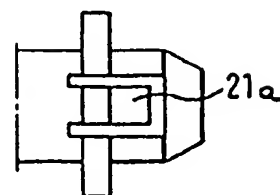


Fig. 14

